

**DEER HERD MANAGEMENT PLAN**  
**Herd Unit # 15**  
**(Henry Mountains)**  
**April 2006**

**BOUNDARY DESCRIPTION**

**Wayne and Garfield counties** - Boundary begins in Hanksville at the junction of SR-24 and SR-95; south on SR-95 to Lake Powell; south along the west shore of Lake Powell to SR-276 at Bullfrog; north along SR-276 to the Bullfrog to Notom road; north along this road to SR-24; east on SR-24 to Hanksville.

**LAND OWNERSHIP**

**RANGE AREA AND APPROXIMATE OWNERSHIP**

	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0%	0	0%	0	0%
Bureau of Land Management	21784	90%	32533	85%	163894	88.2%
Utah State Institutional Trust Lands	2488	10%	4384	11.5%	18567	10%
Native American Trust Lands	0	0%	0	0%	0	0%
Private	0	0%	1347	3.5%	2755	1.5%
Department of Defense	0	0%	0	0%	0	0%
USFWS Refuge	0	0%	0	0%	0	0%
National Parks	0	0%	0	0%	4.9	.003%
Utah State Parks	0	0%	0	0%	0	0%
Utah Division of Wildlife Resources	0	0%	0	0%	0	0%
<b>TOTAL</b>	<b>24272</b>	<b>100%</b>	<b>38263</b>	<b>100%</b>	<b>185221</b>	<b>100%</b>

**UNIT MANAGEMENT GOALS**

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the short and long term carrying capacity of the available habitat. Range trend studies conducted by DWR will be used to evaluate deer habitat health, trend, and carrying capacity. The DCI index was created as an indicator of the general health of big game winter ranges. The index incorporates shrub cover, density and age composition as well as other key vegetation variables. Decreases in DCI suggest that winter range capacity has decreased. The relationship between a decrease in DCI and the reduction of deer carrying capacity is difficult to quantify and is not known.

**POPULATION MANAGEMENT OBJECTIVES**< Target Winter Herd Size:

**Long Term Objective-** Achieve a target population size of **2,000**

**Short Term Objective** – Herd unit management directives require deer populations to be managed according to range conditions based on desirable components index (DCI) scores on winter ranges. Where winter range is a limiting factor, the population objective will be reduced by 20% on any unit/subunit when the weighted DCI score falls within the “poor” classification. On subunits where winter range condition is classified as “fair” or better deer populations will be allowed to expand toward current long-term objectives.

Unit 15	Objective from past plan (2001)	Long-term Objective	2006-2011 Objective	Change
La Sal Mountains	2,000	2,000	2,000	0

Management toward short-term objectives should consider the following;

- Management efforts should focus on improving deer habitat and carrying capacity.
- Declines in winter range carrying capacity are currently not entirely a result of over utilization by deer.
- Population control (if needed) and habitat improvement projects should be focused on areas where range degradation is most prevalent.
- Short term population objectives should be evaluated and updated every 5 years as new Range Trend data is compiled.
- Biologists should closely monitor winter ranges. If deer utilization is excessive and is causing range degradation and subsequently an increase in overwinter deer mortality, short-term objectives should be reduced.

< Herd Composition –

Maintain three-year average post-season classification ratios of at least 35 bucks per 100 does.

Maintain a three-year average age of harvested bucks at 5.0 years.

**POPULATION MANAGEMENT STRATEGIES**< Harvest - Utilize limited entry hunting at conservative levels to maintain the desired herd composition.

**Monitoring**

- < Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model has been developed to estimate winter population size.
- < Buck Age Structure - Monitor age class structure of the buck population through the use of checking stations, postseason classification, uniform harvest surveys and field bag checks.
- < Harvest - Monitor harvest through the state wide uniform harvest survey, and field bag checks.

**Limiting Factors (May prevent achieving management objectives)**

- < Crop Depredation - Take all steps necessary to minimize depredation as prescribed by state law and DWR policy. Depredation has not been a major factor on this unit.
- < Habitat - Quality summer range is more limiting than winter range on this unit. Sagebrush communities have persisted through the drought during the past decade on deer winter range; however the unit as a whole is showing a downward habitat trend.
- < Pinyon-Juniper encroachment – This is currently being addressed. Maintenance on existing chainings is scheduled for work beginning in 2007 to remove pinyon –juniper encroachment on both BLM and SITLA public lands. This work will enhance critical deer summer habitat for years to come.
- < Predation - Refer to DWR predator management policy. Conduct predator (coyote and cougar) management activities when deer herd numbers are below population “triggers” indicated in DWR predator management plan. It calls for intensive control of coyotes by Wildlife Services on fawning and wintering areas. These efforts will be concentrated during and immediately prior to the fawning period.

The cougar is a valued resource in its own right and cougar control will be accomplished primarily through sport harvest to benefit deer. Wildlife Services may be asked to assist with cougar control in those instances where the predator management plan is triggered and positive herd results are expected through control.

- < Illegal Harvest - Should illegal kill become an identified and significant source of mortality, attempt to develop specific preventive measures within the context of an “Action Plan” developed in cooperation with the Law Enforcement Section.
- < Elk - Elk do not pose a limiting factor to the deer herd on the Henry Mountain unit. The population that once numbered 20-30 individuals is now estimated to be below ten. The elk population objective is zero animals. It is managed by hunter harvest to reach this objective.

**HABITAT MANAGEMENT OBJECTIVES**

- < Maintain and/or enhance forage production through direct range improvements throughout the unit to help achieve population management objectives.
- < Work with private and federal agencies to maintain and protect critical existing range from future losses. Excessive critical habitat utilization will be addressed.
- < Provide improved habitat security and escapement opportunities for deer.

**Condition of deer winter range on Unit 15, as indicated by Range Trend Survey**

Year	Mean DCI score for Unit	Classification	Unit-specific DCI score range: Poor	Unit-specific DCI score range: Fair	Unit-specific DCI score range: Good
1999	48	Fair	29-43	44-60	61-76
2004	48				

**HABITAT MANAGEMENT STRATEGIES**

- < Work cooperatively to utilize grazing, prescribed burning and other recognized vegetative manipulation techniques to enhance deer forage quantity and quality. Specifically, cooperate with the BLM through manpower and funding to complete maintenance of existing chainings. Complete at least 100 acres of maintenance projects annually in those chainings that provide summer or year-long deer habitat.
- < Continue to monitor permanent range trend studies located throughout the range.
- < Conduct cooperative seasonal range rides and surveys to evaluate forage condition and utilization.
- < Cooperate with and provide input to land management planning efforts dealing with management decisions affecting habitat security, quality and quantity.
- < **2006 Update:** In 2003 the Bulldog fires swept across Mt. Hillars and Mt. Pennell burning 31000 acres of mostly pinyon-juniper habitat. Mountain brush, fir and ponderosa, and quaking aspen stands also burned. The Lonesome Beaver fire burned 3000 acres on Mount Ellen. Nearly 3000 acres were chained and most all of the burn was seeded aerially in 2004. Forbs, grasses, mountain brush and aspen communities are establishing favorably and should enhance critical and limiting summer habitat.

#### **2004 PERMANENT RANGE TREND SUMMARY**

Lower elevation winter range transects include Eagle Bench (#1) and Stevens Mesa (#15, new site). Cave Flat Chaining (#9) and Cave Flat (#10) were not read due to poor road conditions. Browse trend is slightly down on Eagle Bench. Herbaceous trend is also slightly down on Eagle Bench with perennial species decreasing in nested frequency. The perennial grass component barely contributes to 1% cover, and the forbs are almost entirely made up of annuals. Soil trend for Eagle Bench (#1) is slightly improved, while the Stevens Mesa (#15) is down because of very little herbaceous cover and over 70% bare soil.

Pinyon-juniper chaining projects make up a large portion of spring and summer range for deer and bison on the unit. The most important vegetation aspect of these treatments is their herbaceous understory. Five study sites occur within these treatments. They include: South Creek Chaining (#4), Bates Knob (#5), Box Springs Chaining (#6), Airplane Spring (#7), and Quaking Aspen Spring (#12). Soil trends for all sites were variable. Although, all were down to slightly down except for Airplane Spring which was determined as stable. Most all these downward changes were due to the decrease in protective ground cover. Browse trends were either stable to slightly improved for all of the sites, except Quaking Aspen Spring (#12) which was down because of the fire. The South Creek Chaining (#4), Box Springs Chaining (#6), and Airplane Spring Chaining (#7) showed slightly downward herbaceous trends, while Bates Knob was showing a downward trend with the drought. The only site that showed an upward trend for herbaceous species was Quaking Aspen Spring (#12), where herbaceous species were seeded with the fire rehabilitation.

Other summer range sites which occur outside of pinyon-juniper chainings include a pinyon-juniper woodland which is proposed for future treatment Garden Basin (#8 and suspended until treated); two mountain big sagebrush flats Sidehill Spring (#13 which burned in 2003) and Dugout Creek (#14 new site); two mixed mountain brush sites, Dugout (#3) and Above Coyote Bench (#11), which were both suspended; and one aspen area, Nasty Flat (#2). Sidehill Spring (#13) displays downward soil and browse trends since the fire. The herbaceous trend is upward now with cheat grass playing a more limited role in the understory. The aspen site at Nasty Flat (#2) occurs in a mature aspen stand with little browse component. The baseline was relocated closer to the edge of the clone in 1999 to better sample aspen regeneration. Trends continue to be

stable for all categories except for browse, which was slightly down but of little consequence for this site.

**Duration of Plan**

This unit management plan was approved by the Wildlife Board on \_\_\_\_\_ and will be in effect for five years from that date, or until amended.